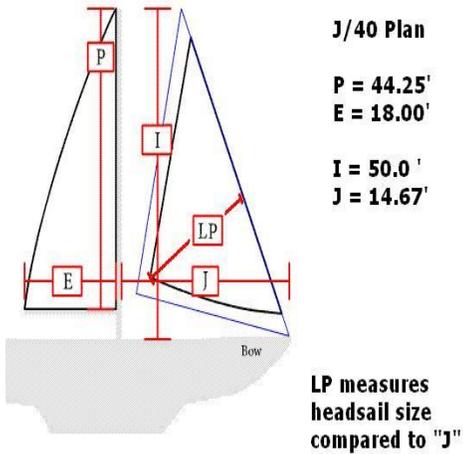


J40 Sails



Version: 5 September 2013

Mainsails

- Main Luff (P)= 44.25' Foot (E)= 18.00'
- Storm Trysail 139 sq ft (Don't have good measurements for this one)

Headsails (LP %s are rough and based on winds expected in your area)

- Light 1 (LP=155%) Luff = 49.5' - LP = 22.74' or approx 24.25' foot
- Heavy 1 (LP = 150%) Luff = 49.5' - LP = 22.0'
- #2 Genoa (LP =135%) Luff = 49.5' - LP = 19.8'
- #3 Genoa(LP =105%) Luff= 49.5' - LP = 15.4'
- Heavy Weather Jib Luff 36-42' ish – 338 sq ft area (anyone measure one they like?)
- Storm Jib Luff = 33' - 125 sq ft area
- Roller-jibs are usually #2s with short luffs to accommodate furling gear.

Spinnakers

- Light Air Sym .5 or .6oz Luff = 49.5'
- All-purpose .6 , .75
- Heavy-Air 1.5oz
- Asymmetrical – .75 reaching spinnaker or poled/pole-less cruiser

Specialty Sails

- Staysail – fly inside a spinnaker for beam and just forward of beam breeze
- Drifter – like a #1 Genoa, but of typically of heavy Nylon like 1.5oz (light air sail)
- Jib Topsail (or JibTop) – a genoa designed for tight reaching - this sail can be handy in distance racing.
- “Code 0” – used on lighter boats for VMG reaching – not much value on J40

Formulas

- Trysail area = $0.175 (P \times E) = 0.175 \times 44.25 \times 18.00 = 139 \text{ sq ft}$
- Storm Jib area = $5\% \text{ of } I \text{ squared} = .05 (50 \times 50) = 125 \text{ sq ft.}$
- Storm Jib luff = $65\% \text{ of } I$, typically with a pennant: $65\% \times 50' = 33'$
- HeavyWeather Jib area = (ie. #4) = $13.5\% \text{ of } I\text{-squared} = 338 \text{ sq ft.}$
- Spinnaker width is $180\% \text{ of the longer of "J" or Spinnaker pole length} = 26.4'$
- Spinnaker Luff = $.95 \times \text{sq rt}(I \text{ squared} + J \text{ squared}) = .95 \text{ sq rt of } (2500+215) = .95 \times 52.1 = 49.5 \text{ ft}$

- Sails from boats other than the J40:

1. Cal40. The measurements are suspiciously similar – I would guess all sails will fit.
2. J/42 – all headsails and spinnakers fit J/40
3. J/120 – all headsails fit. J/120 sprit changes Spinnaker dimensions, but the A1 or A3 might be useful. The J/120 A2 is just huge with a giant shoulder – could be fun, but a handful.
4. Beneteau 40.7 headsails and spinnakers are close.
5. J/37 Headsails and Spinnakers are close.

Note - Roller Sails typically attach to drum and head swivels and have a shorter luff , with a higher clew (shorter leech).

If anyone wants to provide basic measurements, happy to post them.